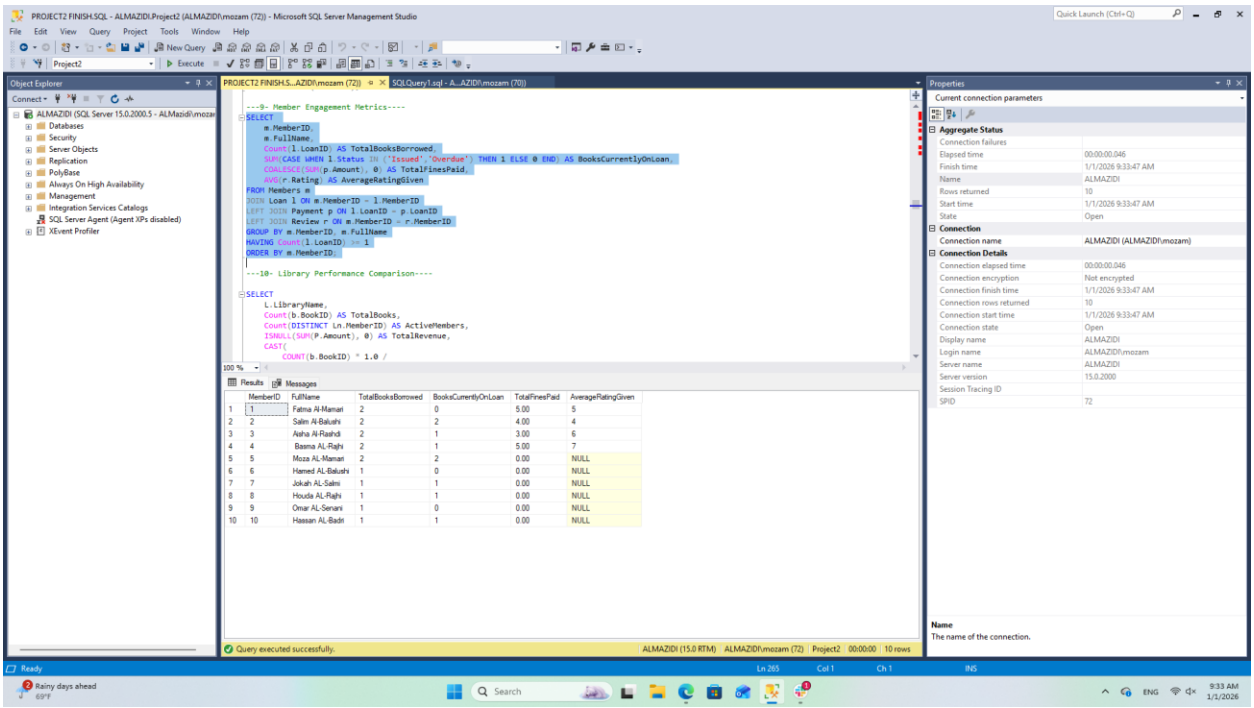
```sql
--4. Staff Performance Overview--
Select
    lib.LibraryName,
    s.FullName AS StaffName,
    s.Position,
    Count(b.BookID) AS BooksManaged
FROM Staff s
JOIN Library lib ON s.LibraryID = lib.LibraryID
LEFT JOIN Book b ON lib.LibraryID = b.LibraryID
GROUP BY lib.LibraryName, s.FullName, s.Position;

---5- Book Popularity Repor---
Select
    b.Title,
    b.ISBN,
    b.Genre,
    Count(l.LoanID) AS TotalLoans,
    AVG(r.Rating) AS AvgRating
FROM Book b
JOIN Loan l ON b.BookID = l.BookID
```

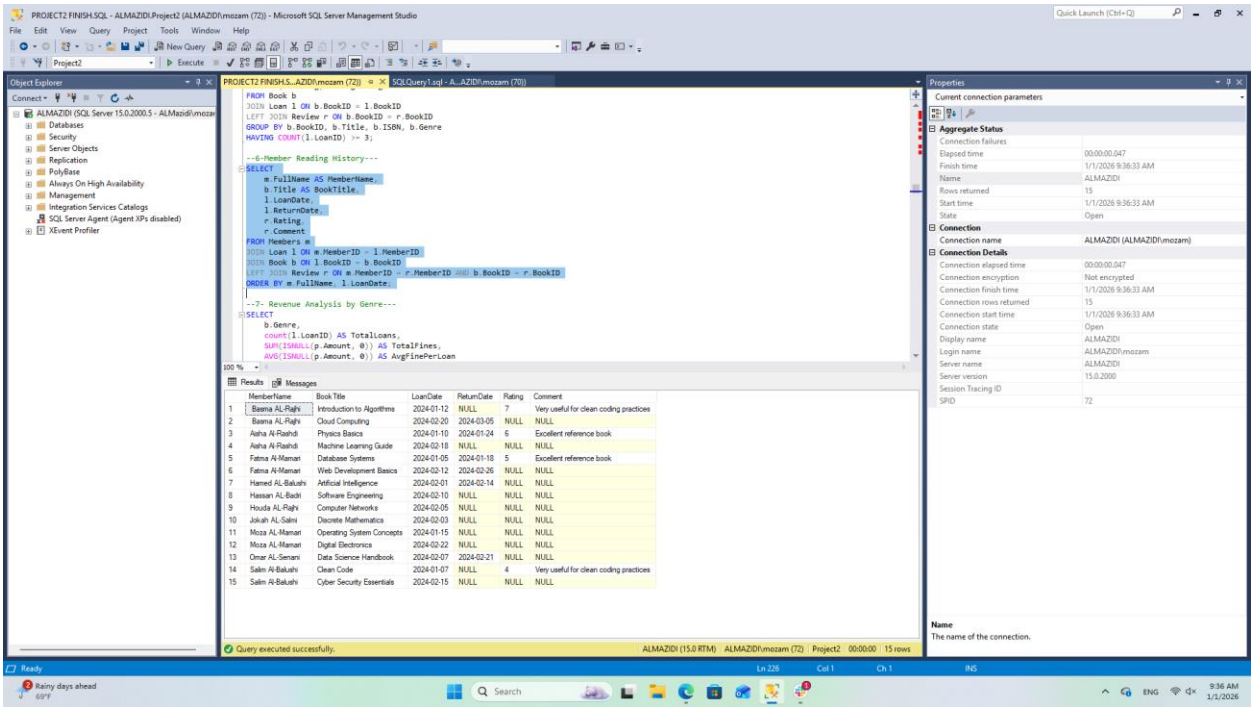
100 %

Results | Messages

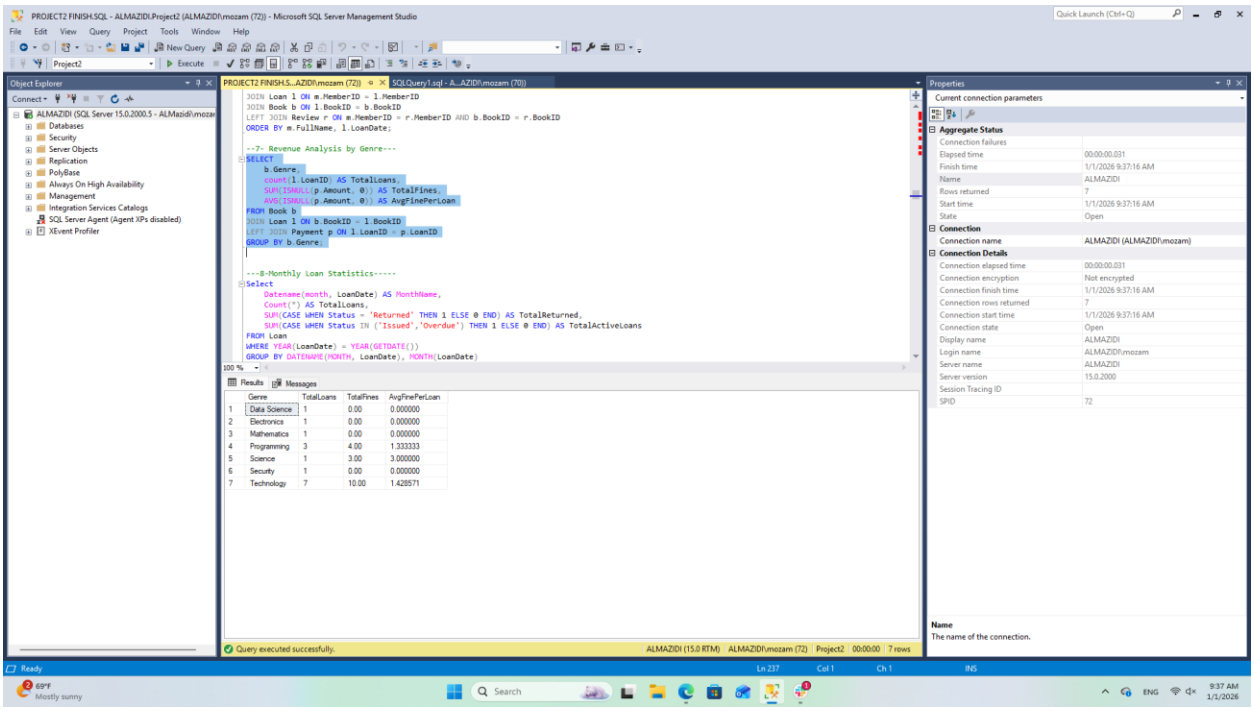
	LibraryName	StaffName	Position	BooksManaged
1	Islamic Library	Bader AL-Badri	Librarian	2
2	Math Library	Zahrah AL-Saidi	Manager	6
3	Central Library	Ahmed Al-Hinai	Librarian	6
4	Science Library	Mona Al-Kindi	Assistant	6


PROJECT2 FINISH.SQL - ALMAZIDI.Project2 (ALMAZIDI\mozam (72)) - Microsoft SQL Server Management Studio
---9- Member Engagement Metrics----
SELECT
m.MemberID,
m.FullName,
Count(l.LoanID) AS TotalBooksBorrowed,
SUM(CASE WHEN l.Status IN ('Issued','Overdue') THEN 1 ELSE 0 END) AS BooksCurrentlyOnLoan,
COALESCE(SUM(p.Amount), 0) AS TotalFinesPaid,
AVG(r.Rating) AS AverageRatingGiven
FROM Members m
JOIN Loan l ON m.MemberID = l.MemberID
LEFT JOIN Payment p ON l.LoanID = p.LoanID
LEFT JOIN Review r ON m.MemberID = r.MemberID
GROUP BY m.MemberID, m.FullName
HAVING Count(l.LoanID) >= 1
ORDER BY m.MemberID;
---10- Library Performance Comparison----
SELECT
L.LibraryName,
Count(b.BookID) AS TotalBooks,
Count(DISTINCT Ln.MemberID) AS ActiveMembers,
ISNULL(SUM(P.Amount), 0) AS TotalRevenue,
CAST(
COUNT(b.BookID) * 1.0 /
Results
Messages
MemberID FullName TotalBooksBorrowed BooksCurrentlyOnLoan TotalFinesPaid AverageRatingGiven
1 1 Fatma Al-Mamari 2 0 5.00 5
2 2 Salim Al-Balushi 2 2 4.00 4
3 3 Aisha Al-Rashdi 2 1 3.00 6
4 4 Basma AL-Rajhi 2 1 5.00 7
5 5 Moza AL-Mamari 2 2 0.00 NULL
6 6 Hamed AL-Balushi 1 0 0.00 NULL
7 7 Jokah AL-Salmi 1 1 0.00 NULL
8 8 Houda AL-Rajhi 1 1 0.00 NULL
9 9 Omar AL-Senani 1 0 0.00 NULL
10 10 Hassan AL-Badri 1 1 0.00 NULL
Query executed successfully.
Properties
Current connection parameters
Aggregate Status
Connection
Connection Details
Name
The name of the connection.

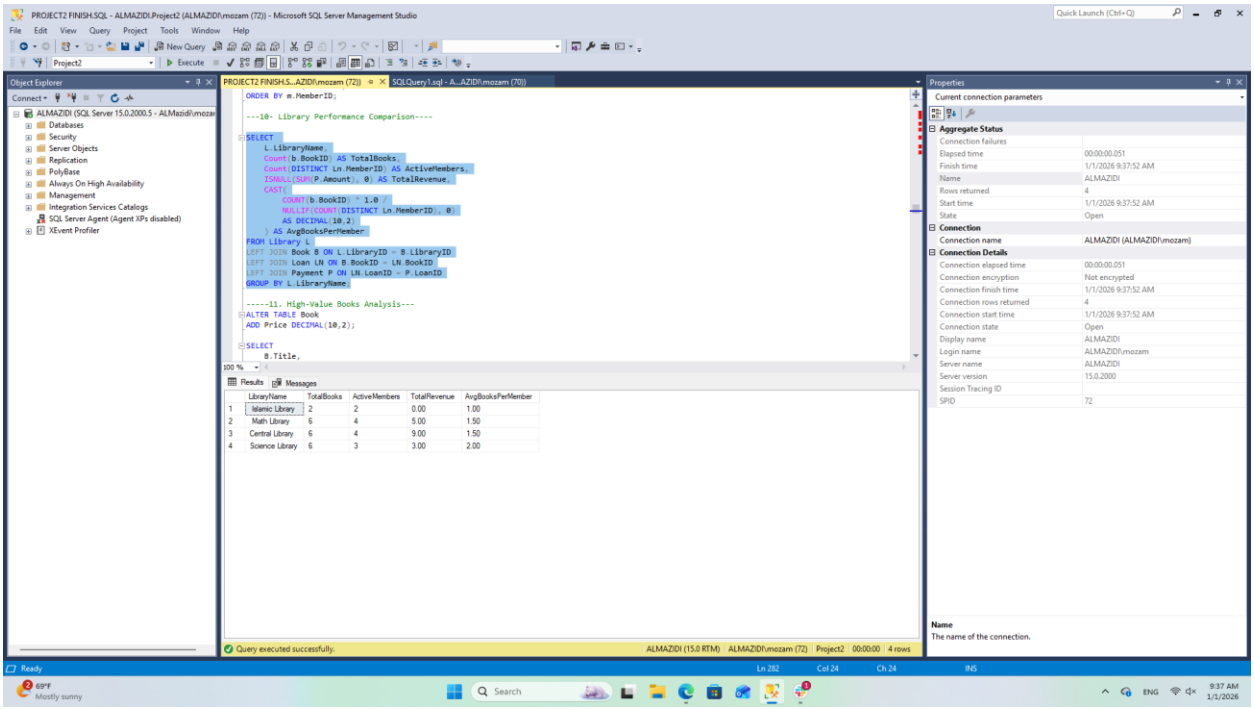
6


PROJECT2 FINISH.SQL - ALMAZIDI.Project2 (ALMAZIDI\mozam (72)) - Microsoft SQL Server Management Studio
FROM Book b
JOIN Loan l ON b.BookID = l.BookID
LEFT JOIN Review r ON b.BookID = r.BookID
GROUP BY b.BookID, b.Title, b.ISBN, b.Genre
HAVING COUNT(l.LoanID) >= 3;
--6-Member Reading History---
SELECT
m.FullName AS MemberName,
b.Title AS BookTitle,
l.LoanDate,
l.ReturnDate,
r.Rating,
r.Comment
FROM Members m
JOIN Loan l ON m.MemberID = l.MemberID
JOIN Book b ON l.BookID = b.BookID
LEFT JOIN Review r ON m.MemberID = r.MemberID AND b.BookID = r.BookID
ORDER BY m.FullName, l.LoanDate;
--7- Revenue Analysis by Genre---
SELECT
b.Genre,
count(l.LoanID) AS TotalLoans,
SUM(ISNULL(p.Amount, 0)) AS TotalFines,
AVG(ISNULL(p.Amount, 0)) AS AvgFinePerLoan
Results
Messages
MemberName Book Title LoanDate ReturnDate Rating Comment
1 Basma AL-Rajhi Introduction to Algorithms 2024-01-12 NULL 7 Very useful for clean coding practices
2 Basma AL-Rajhi Cloud Computing 2024-02-20 2024-03-05 NULL NULL
3 Aisha Al-Rashdi Physics Basics 2024-01-10 2024-01-24 6 Excellent reference book
4 Aisha Al-Rashdi Machine Learning Guide 2024-02-18 NULL NULL NULL
5 Fatma Al-Mamari Database Systems 2024-01-05 2024-01-18 5 Excellent reference book
6 Fatma Al-Mamari Web Development Basics 2024-02-12 2024-02-26 NULL NULL
7 Hamed AL-Balushi Artificial Intelligence 2024-02-01 2024-02-14 NULL NULL
8 Hassan AL-Badri Software Engineering 2024-02-10 NULL NULL NULL
9 Houda AL-Rajhi Computer Networks 2024-02-05 NULL NULL NULL
10 Jokah AL-Salmi Discrete Mathematics 2024-02-03 NULL NULL NULL
11 Moza AL-Mamari Operating System Concepts 2024-01-15 NULL NULL NULL
12 Moza AL-Mamari Digital Electronics 2024-02-22 NULL NULL NULL
13 Omar AL-Senani Data Science Handbook 2024-02-07 2024-02-21 NULL NULL
14 Salim Al-Balushi Clean Code 2024-01-07 NULL 4 Very useful for clean coding practices
15 Salim Al-Balushi Cyber Security Essentials 2024-02-15 NULL NULL NULL
Query executed successfully.
Properties
Current connection parameters
Aggregate Status
Connection
Connection Details
Name
The name of the connection.

7


PROJECT2 FINISH.SQL - ALMAZIDI.Project2 (ALMAZIDI\mozam (72)) - Microsoft SQL Server Management Studio
JOIN Loan l ON m.MemberID = l.MemberID
JOIN Book b ON l.BookID = b.BookID
LEFT JOIN Review r ON m.MemberID = r.MemberID AND b.BookID = r.BookID
ORDER BY m.FullName, l.LoanDate;
--7- Revenue Analysis by Genre---
SELECT
b.Genre,
count(l.LoanID) AS TotalLoans,
SUM(ISNULL(p.Amount, 0)) AS TotalFines,
AVG(ISNULL(p.Amount, 0)) AS AvgFinePerLoan
FROM Book b
JOIN Loan l ON b.BookID = l.BookID
LEFT JOIN Payment p ON l.LoanID = p.LoanID
GROUP BY b.Genre;
---8-Monthly Loan Statistics-----
Select
Datename(month, LoanDate) AS MonthName,
Count(*) AS TotalLoans,
SUM(CASE WHEN Status = 'Returned' THEN 1 ELSE 0 END) AS TotalReturned,
SUM(CASE WHEN Status IN ('Issued','Overdue') THEN 1 ELSE 0 END) AS TotalActiveLoans
FROM Loan
WHERE YEAR(LoanDate) = YEAR(GETDATE())
GROUP BY DATENAME(MONTH, LoanDate), MONTH(LoanDate)
Genre TotalLoans TotalFines AvgFinePerLoan
Data Science 1 0.00 0.000000
Electronics 1 0.00 0.000000
Mathematics 1 0.00 0.000000
Programming 3 4.00 1.333333
Science 1 3.00 3.000000
Security 1 0.00 0.000000
Technology 7 10.00 1.428571
Query executed successfully.
Name
The name of the connection.

10


PROJECT2 FINISH.SQL - ALMAZIDI.Project2 (ALMAZIDI\mozam (72)) - Microsoft SQL Server Management Studio
ORDER BY m.MemberID;
---10- Library Performance Comparison----
SELECT
L.LibraryName,
Count(b.BookID) AS TotalBooks,
Count(DISTINCT Ln.MemberID) AS ActiveMembers,
ISNULL(SUM(P.Amount), 0) AS TotalRevenue,
CAST(
COUNT(b.BookID) 1.0 /
NULLIF(COUNT(DISTINCT Ln.MemberID), 0)
AS DECIMAL(10,2)
) AS AvgBooksPerMember
FROM Library L
LEFT JOIN Book B ON L.LibraryID = B.LibraryID
LEFT JOIN Loan LN ON B.BookID = LN.BookID
LEFT JOIN Payment P ON LN.LoanID = P.LoanID
GROUP BY L.LibraryName;
-----11. High-Value Books Analysis---
ALTER TABLE Book
ADD Price DECIMAL(10,2);
SELECT
B.Title,
LibraryName TotalBooks ActiveMembers TotalRevenue AvgBooksPerMember
Islamic Library 2 2 0.00 1.00
Math Library 6 4 5.00 1.50
Central Library 6 4 9.00 1.50
Science Library 6 3 3.00 2.00
Query executed successfully.
Name
The name of the connection.